

1 BEFORE THE
2 ILLINOIS COMMERCE COMMISSION
3 IN THE MATTER OF:)
4 ELECTRIC POLICY COMMITTEE MEETING)
5 Chicago, Illinois
6 April 11, 2002
7 Met pursuant to notice at 1:30 p.m.
8 BEFORE:
9 TERRY HARVILL, COMMISSIONER
10 RUTH KRETSCHMER, COMMISSIONER
11 MARY FRANCIS SQUIRES, COMMISSIONER
12 (telephonically)
13 APPEARANCES:
14 MS. ARLENE A. JURACEK
15 Vice President, Regulatory and Strategic
16 Services for Commonwealth Edison Company;
17 MR. MICHAEL M. SCHNITZER
18 Vice President, Transmission Operations
19 and Planning, Commonwealth Edison Company;
20 MR. BRUCE A. RENWICK
21 Director, NorthBridge Group, Inc.
22 SULLIVAN REPORTING COMPANY, by
 Tracy L. Ross, CSR

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E X H I B I T S

Number	For Identification	In Evidence
None so marked.		

1 COMMISSIONER HARVILL: Good afternoon. This
2 is a special open meeting of the Illinois
3 Commerce Commission held pursuant to notice.
4 Present today are Commissioner Kretschmer,
5 Squires and myself, Commissioner Harvill.

6 Today's special open meeting was noticed
7 as an electric policy meeting to discuss the
8 status of generation and transmission systems in
9 northern Illinois.

10 This meeting will build upon previous
11 electric policy meetings in that it will form the
12 basis for any market base, rather, last resort
13 mechanism.

14 Today, representatives from Commonwealth
15 Edison will present to the ICC a status of the
16 generation and transmission systems in the
17 emerging competitive environment. This
18 presentation will focus on the common service
19 territory and surrounding region.

20 Ms. Arlene Juracek, Vice President of
21 Regulatory and Strategic Services, will speak to
22 the development of the generation market within

1 the ComEd service territory and its future
2 outlook.

3 Mr. Bruce Renwick, Vice President of
4 Transmission Operations will discuss how the
5 movement into, and out of, and within the ComEd
6 transmission system currently operates.

7 And, finally, Mr. Michael Schnitzer,
8 Director of The NorthBridge Group will address
9 how RTO developments will further enhance the
10 transmission system of the future to accommodate
11 competition.

12 With that, I will turn to Ms. Juracek
13 for the first presentation.

14 MS. ARLENE JURACEK: Thank you. It's my
15 pleasure to be here along with my colleagues to
16 talk about the status of the competitive
17 generation market with a concentration on ComEd's
18 service area but recognizing that we need a
19 regional outlook. So we'll be presenting some
20 regional information as well.

21 COMMISSIONER HARVILL: Can you move a little
22 closer to the microphone.

1 MS. ARLENE JURACEK: Sure. If we can get to
2 the first slide.

3 COMMISSIONER HARVILL: If you can't read it,
4 there are copies outside. Grab a hard copy of
5 it.

6 MS. ARLENE JURACEK: Okay. As Commissioner
7 Harvill noted, this discussion is taking place in
8 the context of provider of last resort
9 discussions. And provider of last resort, of
10 course, makes sense only when customers are
11 leaving and it implies a competitive marketplace.
12 And we know that switching activity, thus far, in
13 the ComEd service area has been quite vibrant.
14 It has been very active, especially, among larger
15 sized customers.

16 And ComEd's provider of last resort
17 proposal seeks to further encourage that movement
18 to the marketplace especially by larger
19 customers. And this would be done by changing
20 their bundled rate offer to one that's based on
21 short-term market prices. And in order to do
22 that, there's a presumption that there is a

1 market or that we're furthering a market through
2 this activity.

3 So the wise question to ask and it has
4 been asked is: Is there sufficient generation
5 and transmission to support a sustainable retail
6 market activity in the Illinois region? So today
7 we are addressing that and it's really an
8 intertwined perspective. Generation and
9 transmission issues go hand and hand as you will
10 hear from our combined three presentations.

11 So I'll begin and talk about generation.
12 Bruce Renwick will talk about the movement of
13 power into, out of and within the ComEd area.
14 And then Mike Schnitzer will wrap it up by
15 talking about RTO developments which will further
16 enhance the transmission systems on a wider area
17 to accommodate transmission (sic).

18 So the big take-away message on
19 generation is that sufficient generation is
20 already built or in the pipeline to meet the
21 ComEd control area peak demand for many years
22 into the future. This is the opposite of where

1 we were just not too long ago, but I'll show you
2 through my subsequent slides that we believe that
3 there is sufficient generation.

4 Furthermore, that generation is going to
5 be a better balanced portfolio. There's been
6 some concern that most of the new generation has
7 been peaking units, but, in fact, when you lay
8 that over the base load generating units that
9 were already in place, it makes sense to balance
10 the portfolio that we've seen in the amount of
11 peaking capacity that we've seen.

12 Furthermore, there are concerns,
13 obviously, about market power and we'll
14 demonstrate that there are various owners using
15 various types of generation to meet the control
16 area load.

17 None of this would have been done if the
18 utilities themselves owned the generation. We do
19 have significant independent power producer
20 development in northern Illinois. And, in fact,
21 between 1999 and 2001, we saw 5,000 megawatts of
22 new generation in the ComEd service area with

1 another 3,500 planned for this year, about 3,000
2 megawatts to be operational for this summer.

3 Furthermore, there's about 4,300
4 megawatts of IPP generation in the queue for
5 service by the end of 2004. And the obvious
6 question is, with market prices as low as they
7 are today, how can we be sure we're going to see
8 that 4,300 megawatts actually constructed? When
9 I asked for this information to be compiled it
10 was presented to me that there's actually almost
11 10,000 megawatts on the drawing boards and this
12 is our assessment. The 4,300, as to what we
13 believe will actually be built and it's based on
14 our information with respect to actual
15 construction beginning or actual equipment being
16 ordered. So there is some uncertainty in this
17 number, but we believe it is a fairly likely
18 number for service by the end of 2004.

19 When we add this new IPP generation to
20 the generation formerly owned by ComEd including
21 both the fossil and the nuclear units, we can see
22 that we expect over 33,000 megawatts of

1 generation in northern Illinois by the end of
2 2004. And this level of generation is sufficient
3 to meet the expected, most likely, 50 percent
4 probably load. And that's what that 50/50 load
5 means, that there's a 50 percent chance of being
6 less than that load and a 50 percent chance of
7 being greater than that load. That's your
8 typical planning criteria that we've always used
9 and that we put reserve margins on top of.

10 So when we look at the load and serve
11 guidelines, we do believe that there's sufficient
12 generation to take us beyond 2010. We've shown
13 up through 2010 on this particular chart between
14 load and capacity.

15 Now we can't just look at what is within
16 the confines of the ComEd control area. We are
17 connected to nine other utilities through
18 tie-line interconnections and, of course, enhance
19 our reliability and facilitate wholesale power
20 transactions. Our next two speakers will get
21 into more detail on the functioning and the
22 status of the transmission systems.

1 So, because we do have transmission
2 interconnections we can also count on additional
3 generation from outside the ComEd service area to
4 be part of the grid. And we believe there's an
5 additional 1,350 megawatts coming on-line in the
6 Mid America Interconnected Network before the end
7 of 2004.

8 And, again, given the significant amount
9 of new generation in MAIN, which would include
10 both the ComEd new generation as well as this
11 1,350 throughout the rest of MAIN, we believe
12 MAIN's reserve margin will be on the order of 17
13 to 20 percent, will either meet or exceed that
14 recommended range.

15 Going beyond MAIN, if we look at MAPP
16 and ECAR, we can also see that there is specific
17 interconnections there and significant generation
18 being built. In 2001 we know that almost 5,000
19 megawatts of new generation was added in the ECAR
20 and MAPP regions and we expect at least another
21 10,000 megawatts to be added in ECAR and MAPP by
22 2005.

1 Again, some of that generation will be
2 needed to serve new load in the MAPP and ECAR
3 regions, but the point is, with an interconnected
4 system, we will have not only the existing
5 generation but significant amounts of new
6 generation to serve the wider region.

7 Now, the big question that always comes
8 up, as I indicated earlier, is the generation mix
9 and some concern that so much of the new
10 generation has been combustion turbine peaking
11 units; but we are seeing, particularly, in the
12 queue through 2004 some intermediate combined
13 cycle facilities. And I think this is a really
14 interesting set of circle diagrams here where we
15 compare the 1998 mix of generation with the
16 projected 2004 mix. And we see that by 2004,
17 peaking will constitute about 30 percent of the
18 capacity; intermediate, about 20 percent; and
19 then the baseload split between 29 percent
20 nuclear and 20 percent coal. And we compare this
21 to the 1998 mix which only had 7 percent peaking
22 and significantly greater amounts of baseload

1 capacity. So we're going to have a better
2 profile of available generation to meet the
3 profile of customer's loads as this capacity is
4 added through 2004.

5 The final issue that I would address is
6 to get at the idea of market power. There has
7 been a concern that so much of the generation is
8 located in just a few players and the last line
9 here really shows that we're moving in the right
10 direction with respect to a diversity of
11 ownership. We list some of the owners of
12 generation in the area compared to the days when
13 it was just ComEd that owned all the generation
14 and you can see, that the 1998 ownership mix only
15 had 5 percent Dominion, 3 percent Southern, and
16 92 percent ComEd. When we moved through 2004 we
17 see that the Exelon generation is 30 percent, the
18 EME is 28 percent, with Dominion at 9.

19 And significantly, all of the other
20 generation adds up to 33 percent of the ownership
21 mix and this is ownership mix defined by numbers
22 of megawatts owned by each of the various

1 players.

2 So we are seeing a diversity of players
3 with a diversity of power types entering the
4 marketplace. We see a sufficient amount of power
5 able to meet, not only, the load requirements,
6 but the reserve requirements. But, of course,
7 all that depends on the robustness of the
8 transmission system.

9 So what I'd like to do is turn this over
10 to Bruce and he'll talk about the ComEd
11 transmission system and then we'll get to Mike
12 who will talk about the RTOs.

13 COMMISSIONER HARVILL: Before we do that, are
14 there any questions from the Commissioners for
15 Ms. Juracek?

16 COMMISSIONER KRETSCHMER: I have a couple.

17 COMMISSIONER HARVILL: Why don't we do it that
18 way since the material's fresh.

19 COMMISSIONER KRETSCHMER: Miss Juracek, on
20 page 5 you talk about IPPs and you list the
21 number of megawatts that have been constructed --
22 will be constructed. What guarantee have we that

1 the megawatts that are being constructed or have
2 been constructed will stay in Illinois? There's
3 nothing that says that an IPP can't build in
4 Illinois and sell that power to Ohio, Indiana, or
5 God forbid Michigan.

6 MS. ARLENE JURACEK: And that's okay because
7 of the way the electrical system works. If the
8 generation is located in the control area, it
9 actually helps to support the control area load,
10 just because of the physics of the interconnected
11 system. So the local generation will support
12 local voltage control, local regulation and local
13 load following if it's a peaker.

14 It's important to have sufficient
15 generation within the control area and even
16 though it contractually may be serving load
17 outside of the service area, it's being located
18 here is very important. And actually, Bruce
19 Renwick gets into that a little bit in terms of
20 loop flows and how the power actually flows.
21 Although contractually, it may be going to
22 Calgary, it's really doing a whole lot of other

1 things in the meantime.

2 COMMISSIONER KRETSCHMER: I'll get around to
3 talking to him about transmission, I have
4 concerns there; but I have one other question for
5 you. Since California, there has been a variety
6 of discussion about how much generation is
7 needed, who should build it, who should own it.
8 Why should I be reassured that in 1998 you owned
9 92 percent of generation and now -- or 2004,
10 you'll only own 30 percent when we're hearing
11 discussion from some ports that indicate that
12 perhaps we made a mistake in allowing the
13 utilities to sell off their generation. Tell me
14 why I should be reassured that, indeed, the
15 capacity that's needed will be available at a
16 market clearing price.

17 MS. ARLENE JURACEK: You correctly started out
18 your question by referring to California and I
19 think you need to look at where you are, what is
20 the model and how the market institution's been
21 set up within a particular area to see if you're
22 making the right decisions. We think that in

1 Illinois, the way it's been set up, it's actually
2 working and the whole point of this is that
3 Illinois is based on a competitive generation
4 marketplace and if that model is going to work
5 you need a variety of players, both buying and
6 selling.

7 And what we're trying to illustrate here
8 is, in the context of open access and in being
9 concerned about a mitigation of market power so
10 that there are less price control issues in an
11 open access environment, this diversity of
12 generation is actually a good thing.

13 And I think what we're seeing this
14 summer, in fact, as prices are tending downwards
15 because there is so much generation and they are,
16 in fact, tending towards long run marginal costs.

17 COMMISSIONER KRETSCHMER: You brought up a
18 third question I didn't intend to ask, but I will
19 ask it now. All of us have seen, I believe, have
20 seen the press release from representative Novak
21 indicating that postponing an open market may be
22 extended for two years and I'm wondering if there

1 is a tendency for the cost of generation to go
2 down, not up. What guarantee do we have that the
3 customers in Illinois will be benefiting?

4 It may very well be that the numbers
5 might show that in two years the prices will be
6 lower if the market were already open instead of
7 higher since the market will still be closed.

8 We're not going to lure any -- as of
9 today, we have no competitors for the retail
10 market here in Illinois, none, even though the
11 market is opening up in a few weeks; what
12 guarantee do we have that customers will be
13 better off two years later, 2006, if, indeed, the
14 cost of production is down and we have a frozen
15 rate?

16 MS. ARLENE JURACEK: Well, like you, I've seen
17 the press release -- I've seen nothing other than
18 the press release to really understand that the
19 substance of what was proposed today in
20 Springfield. What I do understand is that
21 customer choice is not being foreclosed. I
22 believe the press release refers to a bundled --

1 a continuation of a bundled rate freeze for two
2 additional years through 2006. There is some
3 symmetry to that, of course, it coincides the
4 rate freeze with the CTC collection period. But
5 the point is, that customers can choose within
6 that period and can have somewhat of an assurance
7 that there will be that bundled rate offer.

8 COMMISSIONER KRETSCHMER: I understand.

9 MS. ARLENE JURACEK: If prices are lower,
10 they're going to, actually, have opportunities to
11 switch. We've got things like the mitigation
12 factor built into our formulas where there are
13 opportunities to switch, even with a bundled rate
14 freeze.

15 COMMISSIONER KRETSCHMER: Why am I still
16 worried? Because as of now we have no
17 competitors for the retail market in Illinois.
18 Why do we have any in 2004 come in if the system
19 that is in place today will be in place in 2005?

20 MS. ARLENE JURACEK: I think we have seen
21 several competitors who have expressed an
22 interest in the residential market and who have

1 actually begun to do some proactive things, and
2 as soon as they're able to get certified to serve
3 the residential market, I'm sure that we'll see
4 them.

5 Again, we're in a transaction at the
6 very early days of non-residential choice. We
7 only saw one or two competitors and now we've got
8 eight active competitors, I believe it's seven or
9 eight, that are out there and eventually --
10 particularly between now and 2004, if we all
11 agree to do the things that are going to further
12 the marketplace, then we should see additional
13 competitors out there.

14 I know the gas companies, for example,
15 are looking at bundling their gas choice and
16 electric choice programs and there are other
17 expressions of interest from folks, but Illinois
18 was wise in terms of setting up a transmission
19 plan and we need to be patient, I think --

20 COMMISSIONER KRETSCHMER: I don't mean to --
21 what's the word, sandbag you, but if you've run
22 any numbers and I'm sure you have; your company

1 has, I would be delighted to get them showing
2 that there will be opportunities and benefits for
3 customers in 2005.

4 Companies don't usually extend anything
5 because they're being good-hearted. I mean, we
6 all act in our own best interest and I expect
7 companies to do that; but I'd like to see that
8 your own best interest is not in the bad interest
9 of the customers. So if you have any numbers or
10 scenarios that you've run, please let me see
11 them --

12 MS. ARLENE JURACEK: Okay.

13 COMMISSIONER KRETSCHMER: -- and plus, if
14 they're not too confidential.

15 MS. ARLENE JURACEK: Okay.

16 COMMISSIONER KRETSCHMER: Thank you.

17 COMMISSIONER HARVILL: Commission Squires?

18 COMMISSIONER SQUIRES: No, just listening with
19 interest.

20 COMMISSIONER HARVILL: I have two questions.
21 My first questions goes to your Slide No. 10
22 where you talk about generation being owned by a

1 variety of entities. And I can't help but be
2 concerned about the 30 percent market share held
3 by Exelon and the 28 percent market share held by
4 Edison Mission Energy, Midwest Generation. That
5 being said, obviously, transmission import
6 capability, that we're going to talk about in a
7 minute, will help mitigate that potential market
8 power that exists by holding such a significant
9 share of the generation market, but have you done
10 any analysis or conducted any analysis that would
11 present results with regard to the effect of that
12 particular concentration of generation?

13 MS. ARLENE JURACEK: We believe that -- with
14 the concentration of generation as they exist,
15 that market power is mitigated quite
16 significantly. Particularly, if you've got the
17 robust transmission interconnections. And -- you
18 have to look at the mix of the capacity too, the
19 bulk of the Exelon generation is nuclear
20 baseload; the bulk of the Mission Generation is
21 coal based with some peaking capacity.

22 And so there's a role for folks to play

1 in assembling the portfolio supplied for the
2 various retailers.

3 COMMISSIONER HARVILL: I may come back to that
4 after the other presentations. And my other
5 question and I'm just going to follow-up on this
6 in a hypothetical sense as opposed to the
7 specifics of the press release that we've all
8 seen today.

9 But if we are attempting to transition
10 customers to a mechanism like provider of last
11 resort mechanism that resembles something close
12 to a market based rate, what would be the
13 justification for extending the rate freeze for
14 those same consumers?

15 Is it in our best interest to move
16 towards a market based rate that will send the
17 proper price signals to consumers rather than
18 artificially putting in place a rate that will go
19 on for an additional two years? Hypothetically.

20 MS. ARLENE JURACEK: We've differentiated our
21 customers into the larger customers who are
22 actively switching and the smaller customers.

1 And in our smaller provider of last resort
2 proposal, we have actually proposed for a known
3 fixed price proposal for a number of years. So
4 there's nothing incompatible with a rate freeze
5 with that provider of last resort proposal, of
6 course, assuming that those customers will be
7 able to choose and will have options to choose
8 from.

9 We believe that there are sufficient
10 mechanisms in the law, either between now and
11 2004, with the current rate freeze that given the
12 right conditions and the right evidence we could
13 begin to peel customers off and get them better
14 exposed to market prices.

15 But, certainly, one of the lessons that
16 we saw in California was that when you were able
17 to pass market prices through that customers did
18 respond and were able to help contribute to the
19 demand control.

20 COMMISSIONER HARVILL: I guess my question is,
21 is your concern with the continuing obligation to
22 serve compatible with a rate freeze for a

1 particular amount of time?

2 MS. ARLENE JURACEK: I need to take a look at
3 what the proposal actually is.

4 COMMISSIONER HARVILL: Certainly. I'm putting
5 you on the spot. If there are no other
6 questions, we'll continue on. Thank you.

7 MR. BRUCE RENWICK: Good afternoon. I'm Bruce
8 Renwick. I'm the Vice President for Transmission
9 Operations and Planning for ComEd, and on those
10 hot days I'm the guy in the hot seat. So, my
11 presentation today is going to focus on how the
12 present-day transmission system operates.

13 Mike Schnitzer will cover future market
14 and system operations in an RTO.

15 As background, as I said, I'm
16 responsible for transmission operations; that's
17 all the monitoring, switching, compliance
18 transmission service, operations planning,
19 interchange billing activities. I operate the
20 control area which is the generation/load balance
21 and interchange. And we perform long-term
22 transmission planning, IPP interconnection

1 services and studies and evaluation of
2 transmission service requests and technical
3 studies.

4 So how does power move on the ComEd
5 system? Really, in four ways. Power moves from
6 generators connected to the ComEd system to loads
7 connected to the ComEd system, internal flow.

8 Power moves from generators connected to
9 other systems to loads in the ComEd system,
10 imports.

11 Power moves from generators connected to
12 the ComEd systems to loads connected to other
13 systems, exports.

14 And power moves from generators
15 connected to other systems to loads connected to
16 other systems. And these are considered wheeling
17 moves.

18 One of the things you've got to
19 understand about electric flow is, it's a little
20 non-intuitive. If there's a line between the
21 generator and the load, it doesn't mean that all
22 the electricity will go down that line.

1 Electricity is like water, it tends to spread out
2 and flow by the path of least resistance.

3 So, for example, when electricity flows
4 from generators on the ComEd systems or from
5 generators on other systems to load on the ComEd
6 system, some of that electricity flows through
7 other systems. An example of this would be the
8 output of Byron Station. Approximately 28
9 percent of that output leaves the ComEd system
10 and flows out into other systems and then comes
11 back in on various tie-lines at different
12 locations.

13 For an import, another example would be,
14 an import from MidAmerican Energy in eastern Iowa
15 coming to the ComEd system, only about 33 percent
16 of that imported amount -- so if I bought 100
17 megawatts from MidAmerican Energy, only about 33
18 would come in from the west on the lines across
19 the river, the Mississippi River, out at the Quad
20 Cities. Another 6 to 7 percent would come from
21 Alliant West, which lies to the west of us; but
22 the interesting piece is about 28 percent of that

1 purchase would actually come into our system from
2 the east. It would loop all the way around and
3 come in on 765 or the 245 from the east.

4 When electricity flows from generators
5 connected to another system to load on another
6 system, wheeling power we talked about, some of
7 the electricity flows through the ComEd system.

8 An example is Clinton Generating Station
9 located down in central Illinois. About 52
10 percent of the power that it would generate to
11 load in the Illinois power service territory
12 actually comes into the ComEd system and then
13 flows back out to Illinois Power over the
14 tie-lines. So we've got flows coming in and
15 flows going out.

16 And another example, a wheeling example,
17 a sale between Ameren and Xcel Energy, Northern
18 States Power up in Minneapolis, even though
19 they're connected by a 345 KB line directly,
20 about 41 percent of that power would actually
21 flow into our system from the south and flow out
22 to the north. So we have flows that come from all

1 directions.

2 Typical flows on the ComEd system,
3 comEd's generation resources and native load
4 result in a predominantly south to north flow.
5 We have far more generation in the southern part
6 of our system than we do north.

7 Currently, flows on the eastern and
8 western interfaces of our system typically flow
9 east or west. We tend to be in a net exporter at
10 this point time, especially on a day like today
11 when our loads are relatively low. These flows
12 can either increase or decrease depending on the
13 daily energy market and the requirements of other
14 entities outside the ComEd control area.

15 My primary responsibility as
16 transmission operations vice president is to
17 maintain the reliability of the ComEd system and
18 the overall transmission grid. To do that, we
19 plan for different ways in which the power moves.
20 As I talked to you just a minute ago, it's a
21 little non-intuitive including contingencies.

22 To adequately protect the power systems,

1 since it operates, basically, at the speed of
2 light, we need to look ahead and say, what's the
3 next worst thing that could happen to us? And we
4 have to be prepared to be able to deal with that
5 next worst contingency. So I could be sitting
6 here today and everything could look fine; I have
7 a line trip, I have to be prepared to deal with
8 that and make sure I'm not in an overload system,
9 overload condition on another line or a
10 transformer.

11 ComEd has invested approximately \$250
12 million in transmission upgrades and expansion
13 since 2000.

14 When evaluating transmission service
15 requests, now, these are requests that we would
16 get from various power marketers that would come
17 in and say, I want to move X number of megawatts
18 from this time to this time and I want to move it
19 from this point -- from the point of receipt to
20 the point of delivery. When evaluating
21 transmission service requests, ComEd has to
22 ensure that the system, ours and the systems

1 around us remain reliable.

2 ComEd constantly monitors loadings. If
3 you've been out to our office in Lombard, our
4 power office, we have people there 24 hours a
5 day, seven days a week. We monitor generation.
6 We monitor flows across our transmission lines,
7 voltages and we have computer programs that
8 constantly runs stability analysis.

9 So we're constantly looking ahead. As I
10 said at that next worst contingency to make sure
11 we will be able to function appropriately and we
12 have some help in that area in that we have a
13 reliability authority that oversees us.
14 Currently, that is the MidAmerican Interconnected
15 Network, whose offices are in Lombard. In the
16 future, it will go to the appropriate RTO as they
17 develop.

18 What if a problem occurs? What are the
19 tools that I have to use to control the
20 transmission system? Well, in the City of
21 Chicago, I have devices called phase shifting
22 transformers and they operate, essentially, like

1 large wader valves only they can reserve flow,
2 too if they have to.

3 We use them, predominately, on
4 underground transmission lines because
5 underground lines, obviously, were they to have a
6 failure would take the longest to replace and
7 they're the most costly to replace. So by using
8 the phase shifters, we can pretty well control
9 what the flows are on those lines and not have to
10 worry about overloads.

11 Outside the City of Chicago on the
12 large lines you see, my tools are a little
13 reduced. I can use things like dynamic ratings.
14 All a dynamic rating is, is if I see -- if it
15 looks like I'm going to be on an overload on a
16 line and I look outside and see what's the
17 weather like today. Is it a nice cool day? Is
18 there a nice breeze blowing? That will help cool
19 the conductor. In a thermal overload, the
20 overheating of the wire itself is one of the
21 things we worry the most about.

22 Then we can get into curtailing

1 transactions. The famous or infamous TLR process
2 that the nation -- FERC has put out uses -- TLRs
3 are called by regional reliability authority. I
4 can't call a TLR myself. They are -- we'll talk
5 about them a little bit more in a minute; but
6 they're in my bag of tricks to cut down flow.

7 And, finally, as I come down to it, I
8 can try to shift the generation resource. If I
9 know I have a constraint, I can try to reduce the
10 generation on one side of the constraint or raise
11 it on the other to balance out the flows.

12 Again, similar to wadding. If I pump a
13 little more in over here and I don't pump as much
14 in there, I'll eventually level it out no matter
15 how narrow that channel gets.

16 Transmission loading relief, TLR. When
17 used with other forms of control -- it's used
18 when I can't use a dynamic rating or a phase
19 shifter or an operating step, if you will, to
20 relieve loading -- a potential loading problem.

21 Again, this is looking ahead at the
22 contingency. It's a command and control process.

1 It is not economic. It does not distinguish
2 between how much money is going to be made in the
3 transaction and could be shut down. It has to be
4 initiated by the reliability authority. That
5 keeps me, as ComEd, Exelon, from going out and
6 playing games with other people's transactions
7 and it gives the reliability authority the power
8 they need to do it.

9 Normally, the first step is to curtail
10 non-firm transactions that would have a 5 percent
11 impact on whatever element we thought was
12 overloaded or could potentially overload.

13 So, again, on that 100 megawatt sale
14 that I had coming in from MidAmerican Electric,
15 if I thought that was overloading part of the
16 line and at least 5 percent of it flowed on that
17 line, that would be one of the transactions that
18 would get curtailed in a TLR step, level 3, okay?

19 And it goes on, if that gets me out of
20 the problem, if I'm now to a point where the line
21 loading is safe and I can continue to operate
22 there for a long period of time, I'm fine. If it

1 doesn't, my next step would be to curtail what we
2 call firm transactions.

3 A firm transaction under the definition
4 are sales that are just as inviolable as the
5 sales we have with our own customers. So when I
6 get to the point where I have to curtail a firm
7 transaction, I also have to look at the
8 generation to load. In other words, how much
9 power is coming from my own generators that could
10 be going over that line to the ComEd load and I
11 have to curtail that in a pro rata manner to the
12 same percentage, okay?

13 And, finally, beyond that we're into
14 emergency steps where we would take control of
15 generation and raise it or lower it as the case
16 may be.

17 RTO implementation and the standard
18 market design will be changing the need for TLRs.
19 That's one of the real pushes behind it and Mike
20 will talk a little bit more about that.

21 So let's look at TLRs and what they
22 cost. In 2001 TLR curtailment breakdown, in the

1 eastern interconnection which is basically that
2 part of the country east of the Rocky Mountains
3 excluding Texas, there were 931 TLRs called.

4 Only one has been called to protect
5 ComEd facilities and it was called in an
6 emergency situation. We had a 345 KB line where
7 a cross arm broke off and the line came down and
8 tripped out and we had to call a TLR, not because
9 we were overloaded at the time, but based on a
10 contingency; we had a transformer that if we
11 would have had another line trip, it would have
12 been overloaded. So we called it there. We did
13 not get into cutting firm transactions on that,
14 it was a non-firm load and we were able to
15 control it.

16 But the 931 TLRs called in 2001 resulted
17 in 1,469 schedules -- ComEd schedules being
18 curtailed. And a schedule is just exactly what
19 it sounds like, if I'm going to put so many
20 megawatts on the line at this hour and take it
21 off at this hour. It's just like a train
22 schedule, almost. The transaction will flow over

1 this period of time, okay?

2 Of those 1,469 schedules, 1,291 were
3 exported schedules; in other words, generators in
4 our control area exporting energy to the people
5 outside our control area.

6 167 schedules were wheeling schedules
7 and that would be generators outside our control
8 area passing energy through the load outside our
9 control area.

10 And, finally, 11 of those schedules were
11 schedules that were imports, they were from
12 generators outside our load area terminating in
13 our load area, the ComEd load area. Of those 11,
14 5 of them were non-economic area purchases and
15 one was a firm area purchase. So that's part of
16 it. The other part is to be able to get your
17 energy on the wire and that goes to the
18 evaluation of transmission service request.

19 As of January 15th, 2002, ComEd had
20 received in excess of 6,200 requests for
21 transmission service from RES's since open access
22 began in 1999.

1 Approximately 90 percent of these were
2 accepted and confirmed.

3 Approximately 7 and a half percent were
4 invalid or withdrawn by the person, organization
5 that submitted them.

6 And 2 and a half percent were refused
7 due to predicted reliability concerns. Now, 2
8 and a half percent was about 148 schedules. Of
9 those 148 schedules, 21 were due to ComEd --
10 restrictions on the ComEd system either true
11 restrictions on contingencies. Some of those
12 were driven by our routine maintenance activities
13 where we have to take a line out of service for a
14 period of time to do work on it.

15 COMMISSIONER HARVILL: Do you have any
16 information regarding when those occurred and the
17 actual amount of the load that was affected?

18 MR. BRUCE RENWICK: No, I do not as of this
19 point.

20 As of April 1st, 2002, for the year 2002
21 and looking ahead, ComEd has accepted more than
22 1,300 RES questions and refused 5 due to

1 predicted reliability concerns. And of those 5,
2 2 were due to reliability concerns on our system.

3 So now we get to simultaneous import
4 capability. This refers to an estimated amount
5 of energy at a specific load level that can be
6 reliably imported into our system, okay, from
7 various generations located outside our system.

8 The actual value of your simultaneous
9 import capability may be slightly less or
10 slightly more than the estimated level due to the
11 various factors which contribute to flows on the
12 network; if we have huge through flows because
13 it's very hot in Wisconsin and we have a lot of
14 power coming in from the south, that will have a
15 negative effect on our problems.

16 It gives me a general idea as the
17 operator of the system, how much load in the
18 ComEd service territory can be served from
19 external sources -- external generation.

20 And the amount of import capability
21 needs to be added to the predictable -- predicted
22 available generation within the ComEd control

1 area in order to determine if there are
2 sufficient resources to serve the load. And I
3 can tell you with the IPP that's come on, it's
4 greatly reduced my personal stress levels. My
5 doctor is very happy with it.

6 How much generation is deliverable to
7 retail load in the ComEd control area? Again,
8 it's the generation within the control area that
9 might not be committed on a given day plus a
10 generation that can be imported into the control
11 area, net any exports we have going on.

12 Generation within the control area from
13 my standpoint as an operator is more valuable to
14 the generation located outside the control area
15 for some of the reasons, Arlene talked about and
16 also, because I have a better feel for how it
17 will move inside the control area and I know that
18 I'm probably not going to run into transmission
19 constraints on my system. I might still run into
20 problems with loop flows where it flows out and
21 comes around through other systems because the
22 other system might have a problem; but inside my

1 system I've got a better handle...

2 Factors contributing to the amount of
3 deliverable power and energy. Well, the location
4 of the generation with respect to a transmission
5 constraint. If all the available generation sits
6 out in a control area to which there's a
7 transmission constraint between it and me, that's
8 not -- my level of comfort start to drop rapidly.
9 I get worry about that.

10 Transmission configuration. We had a
11 big storm come through, are lines down? Are we
12 doing maintenance work or even our other system's
13 doing this or suffered these types of issues.

14 Generation status. How much generation
15 is available? How much is gone? How much is out
16 of service for maintenance or repair?

17 Regional weather patterns. I talked a
18 little bit about a heat wave in Wisconsin and
19 huge flows through to the north; that's a
20 concern, regional -- would be the same going to
21 the south toward Indiana.

22 Control load -- area load level and net

1 interchange. If I'm at a relatively high load in
2 my control area and I've got a lot of interchange
3 coming in for some reason, I would be more
4 concerned about it. If I've got a lot of
5 exports, I'm not as concerned because it will
6 tend to -- they will tend to net out over the
7 lines.

8 And then, finally, the timing of the
9 requests question that I get it from the --
10 according to FERC rules, I take them on a first
11 come-first serve basis. We look at them, we do a
12 study to determine if they could potentially
13 cause an overload on our system or another and
14 then we can go back and if it looks like there's
15 a potential overload, we can go back and offer
16 the person that would like that contract,
17 opportunities to come in. We've reconducted
18 their transmission lines to allow transactions to
19 flow. We've gone to other utilities and worked
20 with them to allow transactions to flow.

21 So the more lead time I have on that
22 request, the more I can do about it. If it comes

1 in today for tomorrow, my hands are pretty well
2 tied to try to accomplish it.

3 In summary, ComEd has an exemplary
4 record of Transmission System operation in terms
5 of operational constraints and reliable service.
6 One TLR and a grand total of 11 schedules
7 affected. ComEd has been able to accommodate the
8 RES request for transmission service and expects
9 to continue to do so as I talked about the
10 requests.

11 ComEd does not foresee an issue with the
12 deliverability of power and energy from
13 competitive generation to retail loads.

14 ComEd is continuously evaluating and
15 planning for the expansion of the transmission
16 service in order to maintain reliable service to
17 its customers.

18 COMMISSIONER HARVILL: Commissioner
19 Kretschmer?

20 COMMISSIONER KRETSCHMER: Yes. On page 14 you
21 say ComEd has an exemplary record of transmission
22 system operation in terms of operational

1 constraints and reliable service.

2 I might remind you that during the past
3 20 years that this Commission has never denied
4 ComEd or any of the other utilities in the state
5 of Illinois the right to build a transmission
6 system. That is quite contrary to a number of
7 our neighboring states which, obviously, reflects
8 my lack of concern about Wisconsin and Michigan.

9 So I'm going to go back to page 9 and
10 request you a couple of questions because here's
11 the -- you talk about the TLRs. Of the TLRs
12 called neither -- only one was called to protect
13 ComEd facilities, but the others were called,
14 really, for the benefit of other utilities and I
15 think other states.

16 MR. BRUCE RENWICK: Yes.

17 COMMISSIONER KRETSCHMER: Am I wrong?

18 MR. BRUCE RENWICK: No. You're exactly right.

19 COMMISSIONER KRETSCHMER: Well, what does that
20 cost us to be sort of the linchpin for other
21 states that refuse to site transmission
22 facilities?

1 MR. BRUCE RENWICK: I have never gone back and
2 tried to put the dollars and cents together
3 because -- to be very honest with you, that's
4 more of a commercial concern and I tend to be
5 more on the operations side; but it does have a
6 negative effect on how we operate and what we can
7 accomplish, you're right.

8 COMMISSIONER KRETSCHMER: My concern is, on a
9 going forward basis -- and this not a question
10 but more of a statement -- but on a going forward
11 basis, when we're going to have these huge RTOs I
12 wonder if a study is being done or maybe the
13 utilities should do a study on the costs that's
14 going to be involved to meet the demands of
15 electricity flowing in and out of Illinois. It
16 seems to me that if other states are not carrying
17 their fair burden of having transmission systems,
18 then this state may become a bottleneck and
19 certainly will be negatively impacted from a
20 financial viewpoint. So it's just one other
21 issue that maybe we should be, at least, looking
22 at prior to the huge RTO that the FERC seems to

1 like.

2 MR. BRUCE RENWICK: Well, I would tell you
3 this: One of the things about transmission that
4 we have to be aware of is, we are all kind of our
5 brother's keeper; we're interdependent. I
6 understand your concern about the RTOs coming in
7 and, particularly, the bottlenecks and other
8 states. They are a problem for us; but one of
9 the advantages, one of my personal hopes for the
10 RTOs is they will take over regional planning and
11 they will come in and force the people that need
12 to build the lines, build the lines.

13 COMMISSIONER KRETSCHMER: Well, unless there's
14 something I don't know about and that is that
15 Congress has appointed the FERC to site
16 transmission lines, they're going to be sited by
17 states unless that changes and if the states have
18 not deemed it necessary to site them now, what's
19 going to happen in the future?

20 The only question I want to ask is, if
21 you've looked at or, perhaps, should look at
22 1,291 exports and 167 wheeling schedules, that

1 you've had to face under the TLRs and to give me
2 some sort of an answer, not today, on what the
3 financial impact of that has been. If you're
4 profiting -- if you're making a profit on these,
5 that's all well and good.

6 If we are being negatively impacted,
7 financially and then our customers or native load
8 customers, have to foot that bill, that's
9 something I'd like to know.

10 MR. BRUCE RENWICK: The piece of that that I
11 would know about would be the lost transmission
12 revenues which would be a real small piece. The
13 real heavy financial impact is on the various
14 marketing groups and the other utilities that had
15 to go elsewhere to look for power when those
16 schedules were curtailed; either had to run more
17 expensive generation locally or had to do
18 something else and I have -- I really can't get
19 you that, but I could get the transmission
20 revenue.

21 COMMISSIONER KRETSCHMER: Okay. If you would
22 and I don't necessarily -- it doesn't have to

1 come from you, but it's important to know the
2 financial impact of other states not doing what
3 they should be doing that -- what we have done.

4 Thank you.

5 MR. BRUCE RENWICK: Thank you.

6 COMMISSIONER HARVILL: Commissioner Squires?

7 COMMISSIONER SQUIRES: I'm fine. Go ahead.

8 COMMISSIONER HARVILL: You talked about
9 simultaneous import capability on Slide 11. I
10 was looking for information with regard to what
11 is your simultaneous import capability and how
12 does that related to the retail market that's
13 developing in Illinois? Is there sufficient
14 simultaneous import capability to support what
15 level of retail activity coming into the ComEd
16 service territory?

17 MR. BRUCE RENWICK: For this summer, our
18 estimate at peak load is about 3,000 megawatts,
19 simultaneous import capability.

20 But, again, I would go back and say, we
21 have an excess of generation in our control area
22 and so that excess of generation plus the 3,000

1 megawatts of import capability is what let's me
2 sleep better at night now. I know that I can
3 serve that load out there and I know that if
4 people need to get energy they can get it inside
5 of the control area.

6 So we're looking on a go ahead basis as
7 Arlene pointed out, at some substantial reserve
8 margins -- excess reserve margins.

9 COMMISSIONER HARVILL: One of the -- one of my
10 concerns, obviously, is market power as we go
11 forward, not just from Exelon and New Generation,
12 but anybody that has a significant amount of
13 generation.

14 That being said, I mean, I'm curious
15 about information. If you could provide us at a
16 later date with regard to the various scenarios
17 with regard to simultaneous import capability,
18 not just at the peak, but at other times and
19 also, transmission constraints on your systems
20 and the existence of load pockets that may make
21 portions of your system inaccessible to various
22 imports of electricity at difficult times.

1 That's really the meat that I'm looking for here
2 if you could provide that.

3 And I do have one other question for any
4 of the speakers. When this Commission evaluates
5 the existence of market power or market share in
6 this environment, what is the test that we should
7 use to make that evaluation? Should we be
8 looking at simultaneous import capability? I
9 mean, what are the variables that we should be
10 looking at when making that assessment?

11 MR. BRUCE RENWICK: As an operator, from my
12 standpoint, as I said before, the issues that I
13 see are the availability of the megawatts, either
14 importing them or having them homegrown, if you
15 will, so that they're here and available to us.

16 I think there's a substantial amount of
17 megawatts out there that are unspoken for or can
18 be imported into the system. And I think it
19 would probably approach or exceed a third of what
20 I anticipate my peak load to be for this year.

21 COMMISSIONER HARVILL: Okay. Thank you.

22 MR. MICHAEL SCHNITZER: Good afternoon. My

1 name is Michael Schnitzer and I'm with the
2 NorthBridge Group and I've been active in RTO and
3 standard market design in several regions and
4 have some familiarity with the retail competition
5 program here in Illinois. And I think that's why
6 I'm here, to try and talk a little bit about how
7 those two might fit together and how they might
8 influence each other going forward.

9 So, I guess on the first page of my
10 presentation, the topics that I'm going to talk
11 about are, first a quick overview of standard
12 market design. The FERC, I think, is beginning
13 to show us the picture that they have in mind as
14 to how the markets within RTOs ought to be
15 organized, I'll talk a little bit about that.
16 It's a huge topic all in itself, but I'll try to
17 summarize that.

18 And I'll try to talk a little bit about
19 some of the implications of those key features of
20 standard market design for retail access in the
21 ComEd control area and also ComEd's POLR
22 proposals, how they propose to discharge the POLR

1 obligations. So that's kind of the road map
2 here.

3 The next page, the overview of the
4 standard market design, Staff's white paper has
5 been issued which many of you may be familiar.
6 There's a proposed rule-making promised for some
7 time this summer and some of the key elements of
8 that standard market design are summarized in
9 this slide. The first is regional spot energy
10 markets based on LMP pricing, we'll talk a little
11 bit more about that. Congestion charges for --

12 COMMISSIONER SQUIRES: Excuse me,
13 Mr. Schnitzer.

14 MR. MICHAEL SCHNITZER: Yes.

15 COMMISSIONER SQUIRES: Can you talk just a
16 little bit slower. I'm having difficulty getting
17 it down here.

18 MR. MICHAEL SCHNITZER: I'm sorry. I will
19 definitely slow down. Unfortunately, the court
20 reporter is too far away to kick me.

21 COMMISSIONER KRETSCHMER: Get the microphone a
22 little closer as well.

1 MR. MICHAEL SCHNITZER: Is that any better?

2 COMMISSIONER SQUIRES: Yes. Thank you.

3 MR. MICHAEL SCHNITZER: So the first two
4 elements are the spot market's, energy markets
5 using LMP pricing. The second, congestion
6 charges for bilateral schedules, based on
7 location of marginal prices separate and distinct
8 from how the transmission revenue requirement
9 itself is recovered through an access charge.

10 Integrated ancillary services markets,
11 which may or may not be phased in, depending on
12 the implementation schedule in each RTO.

13 And financial rights, or some kind of
14 property rights issued by the RTO to provide a
15 hedge against transmission congestion charges,
16 those are sort of the key market elements that
17 the ERC has announced.

18 And then on top of that, a package of
19 market monitoring and mitigation features which
20 are described in the white paper.

21 On the next page, just to give a quick
22 illustration of LMP and financial rights, this is

1 a huge topic all on its own right; but I think
2 many of you probably have some familiarity with
3 it already, so let me just try and hit the
4 highlights here.

5 We have a simple network here. Three
6 buses, it's about as simple as we can make it.
7 And if you imagine in this particular network
8 that contrary to what -- opposite to what Bruce
9 said, the generators are A and B at the north,
10 the load is at C the south, and in this
11 particular formulation, if you imagine a
12 constraint on a B to C link. What you have is --
13 what LMP does is, whenever there are constraints
14 in the transmission system, power has a different
15 price and a different value on every bus in the
16 network, and so here we've just shown where --
17 under a particular circumstance where the
18 constraint is binding, you might have an LMP of
19 \$20.00 at B, \$40 at A, and \$60 at C. That's what
20 the FERC has in mind. And these prices will vary
21 every hour, basically, through their structure.

22 With that, as a foundation there are two

1 ways for parties to transact in this marketplace.
2 They can schedule bilaterally, which is much --
3 those are the schedules that Bruce was talking
4 about in today's world are the analog, where a
5 party says, I'm going to inject so many megawatts
6 here and I'm going to take them out here, that
7 would be a bilateral schedule.

8 In which case, they would pay congestion
9 charges for that transaction and in this
10 particular example, if someone had scheduled a
11 bilateral from A to C, they would pay \$20 a
12 megawatt hour in congestion. If they had
13 scheduled it from B to C, they would pay \$40 a
14 megawatt hour in congestion charges, the
15 difference between the LMPs is how these
16 congestion charges are calculated. 60 minus use
17 for A to C and 6 -- 60 -- excuse me, 60 minus 40
18 for A to C and 60 minus 20 for B to C. So that's
19 one way to transact bilateral transactions.

20 And the second is just to buy -- buy or
21 sell any one of these buses at the LMP and people
22 can do either. The structure is designed to be

1 neutral, to provide both; but not to tilt it in
2 either fashion.

3 And the last pieces, of course, the
4 financial rights which are the hedges against
5 these transmission congestion charges and the
6 holders of those hedges get paid back the
7 congestion. So if somebody held a right between
8 A and C they would get paid \$20 a megawatt hour
9 whether they scheduled it or not and if someone
10 held a right from B to C, they would get paid \$40
11 a megawatt hour, whether they scheduled it or
12 not.

13 So that's a very quick foundation of
14 what the LMP and financial rights systems will
15 look like.

16 The next page starts to talk about --
17 okay, let's assume that this gets implemented
18 here over the next couple of years. What will it
19 do for us? And there's four points here on this
20 page and we'll just pick through a slide on each
21 one of them.

22 The first is, it will give us regional

1 energy markets with visible spot prices.

2 The second is it will do a lot to ensure
3 the maximum economic utilization of the grid
4 through better coordination of dispatch and
5 transmission across a broader region.

6 Third, it will give proper price signals
7 for generation location and transmission
8 expansion -- and Commissioner Kretschmer, I want
9 to come back to your question when I get there.

10 And then, finally, there will be this
11 package of market monitoring and mitigation
12 features in place as well, that's part of this.
13 So we got one page on each of those.

14 Starting with the regional spot markets.
15 What FERC contemplates is RTO administered energy
16 markets on both the day ahead and a real time
17 basis. Those are kind of the central building
18 block of the markets. Those will be
19 independently administered; that is, they'll be
20 run by the RTO or the RTO's agent, not by any of
21 the market participants or people who are
22 transmission owners or generation owners. The

1 prices will be visible. They will be visible
2 every hour on every bus. They will be public.

3 Those markets will be accessible to all
4 buyers and sellers. Basically, there's no
5 restrictions on who can participate, who can buy
6 and sell, they're very open markets as FERC
7 envisions them. And having these spot markets on
8 both the day ahead and a real time basis provides
9 a foundation for forward markets because now you
10 have cash markets against which to close... So
11 that's the theory of the energy markets.

12 The next page the other benefit, I
13 think, that comes from those energy markets is
14 the maximum utilization of the grid across
15 control areas.

16 When Bruce was speaking a few minutes
17 ago, he mentioned one of his tools is to use
18 redispatch to deal with transmission constraints
19 and, obviously, he can only do that with the
20 generators that he controls, you know. He can't
21 do it with all the generators and if there's a
22 generator in someone else's control area that if

1 we could get some redispatch there, that would
2 really help, we have limited tools for achieving
3 that today and Bruce, in particular, has a very
4 limited capability because he doesn't control
5 those today.

6 In the RTO standard market design
7 markets, all generators within the RTO have
8 economic incentives to offer redispatch to the
9 RTO. It's in their economic interest to do so.

10 And so we expect and we observe in other
11 markets where LMP is already operating that
12 there's a much better set of tools to achieve
13 redispatch, to get the most out of the grid,
14 generators turning down, generators turning up
15 because as Bruce also said, you know, the
16 location of the generator with respect to a
17 particular constrained element is the key
18 variable.

19 So, if you got a line overloading and
20 you've got a generator that sits electrically
21 right on top of that line, you know, less from
22 that generator and more from other generators

1 that spread the flow around it's going to get
2 more through that -- more power through that
3 constraint interfacing.

4 And the RTO gives us much better tools
5 to do that, to optimize generation of
6 transmission through LMP pricing. There are a
7 couple of consequences to that. Bruce eluded to
8 the first.

9 The first prospect is that should reduce
10 the TLRs, where's there's economic redispatch, it
11 can be achieved that TLRs are about to go down
12 and I believe empirical evidence there is that
13 within the LMP markets that the TLRs that
14 originate from those markets are very limited,
15 indeed.

16 So I think that the experience that we
17 have in the PJM in New York bears out that
18 forecast, if you will, and it could increase the
19 level of imports into ComEd. The simultaneous
20 import capability, if there's generation
21 redispatch outside of ComEd that has a bearing on
22 what is simultaneously feasible, who will get the

1 benefits of that -- to the standard market
2 design?

3 The third element here that I'd like to
4 mention is getting better price signals for
5 explanation in both generation and transmission.
6 LMP provides those price signals, even from our
7 simple example, you know, you can see that there
8 were three different -- three very different
9 prices of different buses.

10 Those prices are valuable in a couple of
11 respects. They will tell generators where they
12 might get higher prices if -- and I think that
13 part is pretty clear; but the other piece that's
14 a little less clear is that the differences in
15 LMP between points determine what more
16 transmission capacity would be worth depending on
17 how often the congestion occurs and how big the
18 price difference is. That's what more
19 transmission capacity is worth.

20 And what that does is it allows us to --
21 it gives us an option to think about transmission
22 expansion a little differently and I think in a

1 way that, Commissioner Kretschmer, addresses your
2 concerns that, basically, what we have right now
3 is, we have a mismatch between costs and
4 benefits.

5 If there's transmission expansion in
6 somebody else's system that's going to benefit
7 through transactions but not their native load,
8 you may find reticence, you know, in places where
9 they're the ones paying for it, but the benefits,
10 may increase somewhere else and that may be part
11 of the phenomenon to which you were referring in
12 your questions and comments.

13 What we have the option to do once we
14 get standard market design in place is what we
15 call market-funded expansion, which we call
16 participant funding and, Commissioner Harvill, I
17 know you've heard this term in other forums from
18 me, but, in preference, it's rolled into
19 expansion. Which is basically a way to take
20 these property rights that we have in a standard
21 market design and allow people who invest in the
22 transmission system to get the property rights.

1 The next page is just -- elaborates on
2 that a little bit. Why is that possibility or
3 that new option that we would have had under
4 standard market design important?

5 The first is, it avoids having local
6 load shoulder the burden for investments that
7 don't benefit them. You know, you eluded earlier
8 to, we don't want to be in a position where
9 Illinois is putting in upgrades and paying --
10 Illinois customers are paying for them when the
11 benefits go to Wisconsin.

12 And in this system, you would have an
13 option to where, you know, the people of
14 Wisconsin are the benefiting parties, that they
15 could find the upgrades and get the property
16 rights which is not an option that is very well
17 defined right now.

18 It will send the right price signals for
19 efficient siting decisions by generators. They
20 know what the transmission consequences are of
21 where they locate.

22 It can be used to clarify the upgrade

1 responsibility of new generators, a topic of
2 currently hot interest. And it facilitates this
3 transmission investment and expansion in a way
4 that makes sense and may even address some of the
5 concerns that you indicated earlier, perhaps,
6 not, perhaps I'll hear about that at the question
7 period.

8 The last of the four -- of the features
9 here is the market monitoring and mitigation.
10 And here's just a quick summary of what FERC is
11 proposing as part of their white paper.

12 For mitigation, they basically say they
13 want bid caps on generators as a proxy for demand
14 bidding until demand site bidding is sufficiently
15 integrated.

16 Whatever those words mean, but that's
17 what they said, and must run units subject to
18 mitigation, load pockets and the like,
19 Commissioner Harvill, as you eluded to subject to
20 some kind of a bid or a revenue mitigation as
21 well.

22 They're talking about the RTO having the

1 responsibility for coordinating generation and
2 transmission maintenance outages.

3 And then they talked about Independent
4 Market Monitoring Unit that reports directly to
5 the RTO independent board of directors, I think,
6 are the words in the white paper, as well as to
7 the FERC.

8 And what that unit would do would be to
9 monitor all the markets in the region,
10 transmission and energy and conduct reviews of
11 performance of the markets; to propose rule
12 changes when appropriate with a particular focus
13 on whether or not there is either economic or
14 physical withholding of the supplies, whatever
15 the white paper talks about.

16 So that's a short tour, I guess, of
17 standard market design emphasizing those elements
18 which may be most relevant to retail competition.

19 And this last page now says, What might
20 that do? What might some of the consequences or
21 effect be on retail competition if the standard
22 market design is in place here in 18 months or a

1 few years or whatever?

2 The first is, we have visible prices and
3 liquid markets available to all customers and
4 suppliers. That are -- again, these are
5 independently administered, you know, not by
6 ComEd, not by the generators, it's the RTO set of
7 markets that will be priced every hour at every
8 bus and the ability of anybody to buy and sell in
9 those markets. That seems to do a lot for
10 suppliers in terms of serving retail customers.

11 I think it would have some added
12 benefits in terms of ComEd's large customer POLR
13 proposal which rests on short-term pricing of
14 those. And here we would have a vehicle or
15 achieving some of that pricing that was not
16 within ComEd's purview, if you will, it will be
17 an independent RTO market.

18 It would be easier, even now, to
19 schedule. As Bruce said, he would be
20 hard-pressed to point to any difficulties in the
21 current system of people scheduling the ComEd
22 transmission system, but even so, with the

1 standard market design, all the schedules from
2 the RTO are honored without a request for
3 service. It's just a question of what kind of
4 congestion, pricing, you're going to have; but
5 there's no prequalification or no ticket that you
6 have to have, you can submit your schedule and
7 you don't have to worry further about that.

8 More efficient use of the grid, a
9 potential for greater import capability, I think
10 we touched on that, you know, at some length due
11 to the extended redispatch capability across the
12 region.

13 Balancing and ancillary services will
14 come from the RTO and not ComEd, it's that
15 element to the market design that was phased in.

16 We talked about the improved price
17 signals for economic expansion for both
18 transmission and generation.

19 I think what we're all interested to
20 hear is development of competitive wholesale and
21 retail markets which minimize total costs and
22 will get a better set of price signals for doing

1 that.

2 And then the market monitor -- and the
3 market mitigation mechanisms that are proposed
4 are another layer of protection and another forum
5 other than, you know, complaints to FERC, you
6 know, for dealing with concerns about market
7 abuse or market power, and the like.

8 So that's a quick tour. I welcome your
9 questions.

10 COMMISSIONER HARVILL: Commissioner
11 Kretschmer?

12 COMMISSIONER KRETSCHMER: First, I want to
13 identify who you represent and I notice you're
14 the director of NorthBridge Group, Incorporated.
15 What is that?

16 MR. MICHAEL SCHNITZER: I'm sorry. That's a
17 consulting firm. We're a consulting firm
18 based --

19 COMMISSIONER KRETSCHMER: I'm not fond of
20 consulting firms.

21 MR. MICHAEL SCHNITZER: I hope to be the
22 exception.

1 COMMISSIONER KRETSCHMER: And where are you
2 located?

3 MR. MICHAEL SCHNITZER: Outside of Boston,
4 Massachusetts.

5 COMMISSIONER KRETSCHMER: That's my second
6 strike against you.

7 MR. MICHAEL SCHNITZER: But, your Honor, not
8 Wisconsin or Michigan.

9 COMMISSIONER KRETSCHMER: My question is a
10 simple one.

11 COMMISSIONER HARVILL: He's friends with Bill
12 Hogan too, so if that's all --

13 COMMISSIONER KRETSCHMER: I'm not sure. I'll
14 have to think about that one.

15 My question is, have you looked
16 specifically at the effect that license plate
17 rates will have in Illinois? What I'm talking
18 about is Illinois is an exporting state and as
19 such, if we are, if our utilities are mandated by
20 the FERC to become a part of the MISO.

21 Have you looked, specifically, at what
22 the financial impact would be on the utilities in

1 Illinois, if they have to use the license plate
2 pricing? I understand that's the mandates for
3 five years at this point which I suppose the FERC
4 could change, but five years pricing, have you
5 looked at that?

6 MR. MICHAEL SCHNITZER: I have not looked
7 specifically at the Illinois situation. I'm
8 familiar with the generation issue of cost
9 shifting and I think that FERC has indicated some
10 flexibility to figure out a way to make these
11 transitions without costs shifts but I don't know
12 the particulars of the MISO debate.

13 COMMISSIONER KRETSCHMER: I might suggest that
14 you look at the effect on importing states and
15 exporting states. There is a definite financial
16 divide and until such time as there is a more --
17 what's the word I'm looking for -- fair.

18 Until the time there is a fair pricing
19 system, I think you're going to find resistance
20 among some regulators from the exporting states
21 who are being negatively impacted by the
22 importing states.

1 MR. MICHAEL SCHNITZER: I understood. I think
2 that it's unfortunate there's always a way to do
3 it without causing dislocations and it sounds
4 like that way hasn't yet to be found with the
5 MISO.

6 COMMISSIONER KRETSCHMER: Not to my
7 satisfaction. That's the only question I have.
8 Thank you. I don't dislike you personally.

9 MR. MICHAEL SCHNITZER: Thank you.

10 COMMISSIONER HARVILL: You can sleep well
11 tonight.

12 COMMISSIONER KRETSCHMER: Yes.

13 COMMISSIONER HARVILL: Commissioner Squires?

14 COMMISSIONER SQUIRES: Thank you. I enjoyed
15 it all very much and the only question that I
16 would like to ask is, do they have any idea when
17 this is all going to take place? Any
18 guesstimates.

19 MR. MICHAEL SCHNITZER: They are -- either
20 that or maybe just a little better than that. I
21 think the MISO's implementation schedule for a
22 broad market in conjunction with the PJM market

1 rules and some other kinds of things. I think is
2 based -- they're talking about having the energy
3 markets operational sometime in the later part of
4 2003, is my understanding of their schedule.

5 COMMISSIONER SQUIRES: Okay. Thank you.

6 COMMISSIONER HARVILL: Actually, she took my
7 question. You mentioned the 18-to 24-month time
8 frame. Is it conceivable to have an LMP based
9 system in place for the entire Midwest and
10 arguably for the entire country in that time
11 frame?

12 MR. MICHAEL SCHNITZER: I don't know about the
13 entire country part of it.

14 COMMISSIONER HARVILL: Just focus on the
15 Midwest.

16 MR. MICHAEL SCHNITZER: Right. Parts of the
17 Midwest has got some things going for them in
18 that, they were working along these lines, you
19 know, prior to the FERC standard markets design
20 rule making.

21 Commonwealth Edison has been a supporter
22 of this kind of system for sometime and I think

1 in the Alliance, MISO conversations which have
2 gone on for some time, there's been some
3 conversation of how to do that.

4 So my understanding is that, at least,
5 in this region, that may be a reasonable
6 estimate, although, these, you know, these
7 schedules always have some uncertainty in them
8 and I wouldn't want to say that slips are not
9 possible or even likely, but I think that's 2003,
10 end of 2003 is a reasonable point within that
11 range, anyway.

12 COMMISSIONER HARVILL: Not to turn this into a
13 debate between MISO and Alliance, but how does
14 the standard market design fit in with the
15 current debate with regard to multiple RTOs
16 within the Midwest?

17 If -- under a hypothetical situation,
18 that the Alliances is allowed to upgrade and
19 administer their own tariff, how will that
20 function with regard to -- how standard market
21 design function with regard to the variability
22 MISO and Alliance?

1 MR. MICHAEL SCHNITZER: Well, putting aside
2 that issue within the Midwest, one of FERC's
3 goals out of this whole process is to diminish
4 the impact of it seems between the RTOs such that
5 markets do better. I mean, for instance, right
6 now you have two markets, two ISOs that are
7 adjacent, New York and PJM that are both LMP, but
8 not consistent forms of LMP, so there's some
9 problems there.

10 So I think FERC's goal could very much
11 be to have the systems be similar enough that
12 even between RTOs that these would be internally
13 consistent pricing -- spot pricing and congestion
14 payments.

15 And so at that point, the boundary of
16 one RTO versus two would not have effects on the
17 energy market piece of things. It might have
18 other effects as Commissioner Kretschmer was
19 eluding to in terms of, you know, license plates
20 and revenue flows and things like that.

21 But in terms of the operation of the
22 energy market's congestion, I don't believe that

1 RTO boundaries needs play a large factor here.

2 COMMISSIONER HARVILL: I'm curious in your
3 opinion of the FERC's standard market design
4 proposal. Are there any aspects of it that you
5 would care to comment are -- and I'm quoting now,
6 Lost rather -- bread to be fed to pigs in the
7 USSR. What are the potential potholes in the
8 system?

9 MR. MICHAEL SCHNITZER: Well, I think it's --
10 I think that -- I think the white paper is a good
11 indicator of what the rule making will be, which
12 I have no reason to believe otherwise. I think
13 it's largely a very good effort.

14 My concerns are more in what's not yet
15 specified then what is specified. I think what
16 is specified is quite good. The two areas that
17 I'm a little bit concerned about how they work
18 out is, first, the one that you elude to is that
19 I think there's a missed opportunity not to
20 specify transmission expansion and a preference
21 for what we call participate funding as opposed
22 to rolled in or to circumscribe the conditions

1 under which rolled in would be appropriate.

2 More closely and I think -- so that's an
3 area that they've held out for further work. And
4 if they're right, it does need to be worked out
5 and depending on how they resolve that, I'll feel
6 better or worse about that aspect.

7 The second is the on-going conversation
8 about -- you know, point to point versus flow
9 gate based rights. And the white paper says all
10 the right things. It says flow gates, where
11 feasible, but, you know, we've been debating that
12 feasibility for a long time. I've still got
13 questions in my mind. So as long as it doesn't
14 get in the way of point to point, which does work
15 and is feasible, I'm okay with that, too. Those
16 are the two that come to mind.

17 COMMISSIONER HARVILL: Because there are
18 people out there who probably know a lot more
19 about this than we do, if there are any
20 clarifying questions and I emphasize the words
21 clarifying questions, you may ask them of our
22 panelists at this time. If you have any, please

1 state your name and your organization.

2 COMMISSIONER KRETSCHMER: We know as much as
3 they do.

4 COMMISSIONER HARVILL: I don't know about
5 that. No questions? If not, thank you very much
6 for your time. I appreciate you coming down and
7 spending the afternoon with us and if you could
8 follow-up with us next week or so with regard to
9 the questions that were posed, we would greatly
10 appreciate that.

11 And if there's no further business to
12 come before the Commission, I will adjourn this
13 meeting. We are off the record.

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CERTIFICATE OF REPORTER

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TITLE: ELECTRIC POLICY COMMITTEE MEETING

 I, Tracy L. Ross do hereby certify that I am a
court reporter contracted by SULLIVAN REPORTING
COMPANY, of Chicago, Illinois; that I reported in
shorthand the evidence taken and the proceedings
had in the hearing on the above-entitled case on
the 11th day of April A.D. 2002; that the
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transcript of my shorthand notes so taken as
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be stenographically reported.

 Dated at Chicago, Illinois, this 15th
day of April A.D. 2002.

TRACY L. ROSS